

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF HAWAI'I

In the Matter of)
)
PUBLIC UTILITIES COMMISSION)
)
Instituting a Proceeding to)
Investigate Distributed)
Generation in Hawaii.)
)
)
_____)

Docket No. 03-0371

PUBLIC UTILITIES
COMMISSION

2004 JUN 16 A 10:30

FILED

THE DEPARTMENT OF BUSINESS, ECONOMIC DEVELOPMENT, AND TOURISM'S
CONSOLIDATED RESPONSE TO INFORMATION REQUESTS
ON ITS PRELIMINARY STATEMENT OF POSITION
and
CERTIFICATE OF SERVICE

Filed _____, 2004

At _____ o'clock ____m.

Chief Clerk of the Commission

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF HAWAII

In the Matter of)	
)	
PUBLIC UTILITIES COMMISSION)	
)	Docket No. 03-0371
Instituting a Proceeding to)	
Investigate Distributed)	
Generation in Hawaii.)	
)	
)	

THE DEPARTMENT OF BUSINESS, ECONOMIC DEVELOPMENT, AND TOURISM'S
CONSOLIDATED RESPONSE TO INFORMATION REQUESTS
ON ITS PRELIMINARY STATEMENT OF POSITION
and

CERTIFICATE OF SERVICE

DBEDT received Information Requests (IRs) on its Preliminary Statement of Position (PSOP) from the Consumer Advocate, Hawaii Renewable Energy Association, Hawaiian Electric Company, Life of the Land, and The Gas Company. The IRs directed to DBEDT from these organizations and DBEDT's replies are included in this filing.

Table of Contents

Organization	Page
Consumer Advocate	2
Hawaii Renewable Energy Association	5
Hawaiian Electric Company	7
Life of the Land	17
The Gas Company	22

Consumer Advocate

CA-SOP-IR-59: Ref: DBEDT Preliminary SOP, chapter 3, page 19, paragraph 1, lines 12 through 16.

- a. Please confirm that it is DBEDT's position that small customers would encounter the likelihood of having no electric service during peak periods when the customer's DG unit is out of service?
- b. If this understanding is incorrect, please elaborate on DBEDT's position and how small customers would be served during peak periods when the customer's DG is out of service.

DBEDT Reply to CA-SOP-IR-59: In the referenced passage, DBEDT cited *A Framework For Developing Collaborative DER Programs: Working Tools for Stakeholders* in its Preliminary Statement of Position (PSOP), which was developed by E2I and was provided as Appendix 2. E2I's view is based on the idea that 'demand subscription' and non-firm standby options offer alternatives to conventional standby charges that often discourage DER development. As summarized in DBEDT's PSOP, E2I stated:

Standby rates typically assume that the utility retains its obligation to supply the customer's load when the customer's onsite generation is down for maintenance or unscheduled outages. Demand subscription and non-firm rates instead assume that customers should be able to choose the level of standby they need for their operations. For DER customers that do not require firm service or value it highly, demand subscription offers a way to pay only

for the capacity they do need and value, accepting some level of risk in return for reduced costs.

CA-SOP-IR-60: Ref: DBEDT Preliminary SOP, chapter 3, standby charges, page 23, number 16.

- a. Please provide a detailed discussion of how the Commission will implement the regulatory system that would allow the transition from a distribution system and rate base designed to serve 100% of a customer's energy use to paradigm where customers are charged based on as-available use.
- b. Please confirm that it is DBEDT's assertion that customers who use the distribution system on an as-available basis should only pay variable charges, and no fixed charges whatsoever, because, at non-peak times, if a particular customer did not use the system, there would be "excess" capacity on the distribution system where no contribution to the fixed costs would be recovered anyway.

DBEDT Reply to CA-SOP-IR-60: In the referenced passage, DBEDT quoted the California Public Utilities Commission's (CPUC) Decision 01-07-27, *Interim Decision Adopting Standby Rate Design Policies*¹, (See Section 7. Discussion and Summary of Adopted Standby Rate Design Framework² and Conclusions of Law³).

In Section 7, the CPUC defined the major issues in standby rate design in its view. The provision DBEDT cited was one of the

¹ Available at http://www.cpuc.ca.gov/PUBLISHED/FINAL_DECISION/8823-06.htm#P266_103971

² Section 7 at http://www.cpuc.ca.gov/PUBLISHED/FINAL_DECISION/P273_105965#P273_105965

³ Conclusions of Law at http://www.cpuc.ca.gov/PUBLISHED/FINAL_DECISION/8823-10.htm#TopOfPage

CPUC's "Conclusions of Law", which included the following:

16. Maintenance customers and others whose use of the distribution system is on an as-available basis should be charged a volumetric rate, based on usage that recovers variable distribution costs but does not include peak demand-related infrastructure costs.

DBEDT does not offer a design as to how the Commission will implement the regulatory system to transition from a distribution system and rate base designed to serve 100% of a customer's energy use to a paradigm where customers are charged based on as-available use. What DBEDT sought to offer for consideration in citing the California experience is that some customers may only need as-available electricity and may be able to avoid using utility electricity during peak periods. DBEDT believes development of tariffs to recover only the costs of the service these customers pose to the system should be considered using experiences of other regulatory jurisdictions, such as California, as an example.

As to the second part of the CA's question, the assertion is not DBEDT's, but is a "Conclusion of Law" of the CPUC. The CA's interpretation conforms to the CPUC Conclusion.

Hawaii Renewable Energy Association

HREA-DBEDT-IR-1: Referencing pages 5 to 6 of DBEDT's SOP (Implementation: Issue 9), DBEDT discusses Interconnection Standards and Interconnection Agreements for DG. Would DBEDT support the collaborative development of revised interconnection standards for DG in Hawaii?

DBEDT Reply to HREA-DBEDT-IR-1: As stated in our PSOP, DBEDT defers to DG owners and vendors as to whether there may be a need to change or update the HECO interconnection agreement. However, DBEDT could support the concept of collaborative development of such standards, should the Commission ultimately decide this is warranted.

HREA-DBEDT-IR-2: Referencing page 8 (Planning: Issue 2), DBEDT states: DBEDT believes that electric utility customers/end users, energy service companies/DG vendors, and the electric utilities should be allowed to own and operate DG projects. DBEDT supports a level playing field when it comes to DG ownership and operations relative to the utilities, which could also complement their marketing of energy efficiency measures

DBEDT discusses this issue further on pages 9 to 10, regarding the role of the regulated electric utility in the deployment of DG in Hawaii. Would not a regulated utility entity have an unfair competitive advantage over non-utility entities wishing to supply DG products and services? If not, why not?

DBEDT Reply to HREA-DBEDT-IR-2: HREA's question seems to be overly broad and presumptive. DBEDT's support of a notionally

level playing field implies appropriate regulation of all participants in the market.

HREA-DBEDT-IR-3: As a follow-up to HREA-DBEDT-IR-3, would DBEDT support the following approach to planning and implementing DG, including CHP, in Hawaii? The regulated utility specifies areas and amounts of desired DG (including CHP) in IRP and then solicits (in a competitive bidding process) for DG proposals from potential DG customers and ONLY non-utility energy service providers. Specifically, only an unregulated utility entity would be allowed to compete with other non-utility entities. If not, why not?

DBEDT Reply to HREA-DBEDT-IR-3: As in reply to HREA-DBEDT-IR-2, DBEDT supports the concept of a regulatory structure that would balance participation in the DG market by regulated and non-regulated, competitive development of DG/CHP.

HREA-DBEDT-IR-4: (General Question) HREA understands that DBEDT is in the process of completing a study of DG in Hawaii. Are there any preliminary results regarding the potential market for DG in Hawaii, and any other relevant information, that could be made available at this time?

DBEDT Response to HREA-DBEDT-IR-4: DBEDT's consultant, Global Energy Partners, prepared a report entitled, Creating Distributed Energy Opportunities for Hawaii.

DBEDT will complete its editing and provide CD-ROM copies to the parties by the end of July 2004.

Hawaiian Electric Company

HECO/DBEDT-IR-1: Ref: DBEDT Preliminary Statement of Position, page 9

- a. Is it DBEDT's position that the electric utility's IRP process should investigate localized least cost planning, or is DBEDT merely offering this concept as a suggestion?
- b. Did DBEDT raise the concept of localized least cost planning in any of the IRP Advisory Group or Technical Committee meetings? If the answer is no, please explain why not.
- c. What other regulated electric utilities investigate localized least cost planning?

DBEDT Reply to HECO/DBEDT-IR-1: a. and b. Our PSOP offers the concept as a suggestion. DBEDT's position is that the electric utility's IRP process may benefit from localized least cost planning. We believe, however, that this Docket is the place for consideration of incorporating the use of localized least cost planning into the IRP process.

c. Additional research on this issue did not find any other regulated utility using localized least cost planning.

HECO/DBEDT-IR-2: Ref: DBEDT Preliminary Statement of Position, page 23

Does DBEDT believe that it is prudent for the regulated electric utility to adopt a portfolio type approach to meeting the electric needs of its customers with a combination of DG/CHP

resources, central station generation, renewables, demand-side management programs and conservation initiatives?

DBEDT Response to HECO/DBEDT-IR-2: Yes, if the portfolio also comports with Hawaii's recently enacted Renewable Portfolio Standard (Act 95, Session Laws of Hawaii 2004).

HECO/DBEDT-IR-3: Ref: DBEDT Preliminary Statement of Position, page 12. RE: Restructure distribution tariffs to reduce excessive fixed charges

- a. Please explain how this statement relates to HECO's Schedule J and Schedule P rate schedules.
- b. Please explain what is meant by "excessive fixed charges" and how it relates to HECO's Schedule J and Schedule P rate schedules.

DBEDT Reply to HECO/DBEDT IR-3: The statement cited by HECO was one of the general recommendations of *Small Is Profitable*:

- a. Restructure distribution tariffs to reduce excessive fixed charges. The authors recommend that the distribution [portion of the] tariff structure be progressively shifted toward a greater proportion of volumetric pricing (usage-based unit prices) rather than fixed pricing. The unit prices should aim to approach the long-run marginal costs of the system in order to send correct price signals and promote economic efficiency.

DBEDT does not have detailed information on the distribution cost components of HECO Schedule J and Schedule P. DBEDT offered the referenced information for the consideration of all docket parties. However, from the effective rate schedules, we note that Schedules J and P have fixed charges in the form of customer charges and demand charges. The monthly minimum charges are quite high; assuming a DG/CHP owner remained connected to the grid, but used no electricity.

HECO/DBEDT-IR-4: Ref: DBEDT Preliminary Statement of Position, page 8

Does DBEDT believe that the reason why so few residences have installed net metered systems is because they are not cost-effective relative to current utility electric rates?

DBEDT Reply to HECO/DBEDT-IR-4: In the referenced passage, DBEDT suggested consideration of simplified interconnection standards similar to those now used for net-metered renewable systems to small non-renewable DG, at a capacity greater than 10 kW. Our recommendation focused on commercial DG, the installation of which could be additionally encouraged by available tax benefits, public relations benefits, and (depending on technology) potentially lowers electricity costs and/or increased predictability of future costs.

DBEDT believes that some renewable net metered systems may become more cost-effective at larger capacities. While other renewable technologies may not be cost-effective now, some additional residential customers may install net metered renewable systems if they were made aware of the program and the environmental benefits as well as the costs of net metered options in relation to potential future costs of central station

generation. These could be considered as potential marketing levers as Hawaii electric utilities seek to achieve RPS percentages toward which these systems will be factored.

HECO/DBEDT-IR-5: Ref: DBEDT Preliminary Statement of Position, page 10

What regulated electric utilities in other jurisdictions have adopted the recommendation that DBEDT cited from R. S. Brent of Solar Turbines Incorporated?

DBEDT Reply to HECO/DBEDT-IR-5: This question was addressed in IR-1c, above.

HECO/DBEDT-IR-6: Ref: DBEDT Preliminary Statement of Position, page 11

What is DBEDT's recommendation to the Commission on the concept of decoupling regulated electric utility revenues from sales?

DBEDT REPLY TO HECO/DBEDT-IR-6: The authors of *Small Is Profitable* state that DG poses four primary threats to the existing vertically integrated business model. First, DG results in the loss of revenue, because the customer purchases less electricity. Second, more substantial market capture by DG can result in stranded grid capacity no longer needed. Third, the ability to deploy DG more rapidly than centralized generation or transmission upgrades may partially strand new capacity additions. Fourth, the combination of the first three threats can create a "death spiral" in which the higher prices to remaining customers induce more of them to leave this system,

creating a self-reinforcing cycle of ever-increasing unit prices. The authors recommend:

Decouple utility revenue requirements from kWh sold, and create incentives to lower customers' bills, not price per kWh. . . . Regulated utilities should be rewarded not for selling more kWh, but for helping customers get desired end-use services at least cost. Utility shareholders should share in the savings if overall revenue requirements are reduced. This can be done by a performance-based approach to providing utility incentives.

DBEDT notes that the HECO utilities' revenues per kWh, fuel and purchased power costs per kWh, and non-fuel/non-purchased power costs have consistently grown much faster than the Honolulu CPI since at least 1990.

DBEDT also notes that Act 95, Session Laws of Hawaii 2004, the new RPS law, already directs the Commission to investigate and develop rate structures, including performance-based rate structures as cited above. Therefore, our recommendation would be for the Commission to concurrently consider DG in this effort.

HECO/DBEDT-IR-7: Ref: DBEDT Preliminary Statement of Position, page 23. Please explain in greater detail the positive impacts that DG/CHP will have on power quality and reliability.

DBEDT REPLY to HECO/DBEDT-IR-7: In our discussion of the impacts of distributed generation on power quality and reliability, we stated:

Generally, DG can enhance power quality and reliability for users. As noted in our discussion of Issue 3, DG should be used instead of transmission and distribution system additions, if financially and technically appropriate. Upgrades for businesses or organizations requiring greater reliability than the utility system offers could also be examples.

The utility can also benefit from improved power quality and reliability provided by DG as demonstrated by both MECO and HELCO in recent years. Please see the discussion of Issue 3.

Small Is Profitable lists ten benefits of DG for power quality - benefits 110 to 119 out of the 207 Benefits of DG described in the book (see pp. 225-231). Examples include:

110 Distributed resources can reduce reactive power consumption by shortening the electron haul length through lines and by not going through as many transformers--both major sources of inductive reactance.

113 Distributed generators that feed the grid through appropriately designed DC-to-AC inverters can provide the desired real-time mixture of real and reactive power to maximize value.

119 Distributed resources, by reducing line current, can help avoid voltage drop and associated costs by reducing the need for installing equipment to provide equivalent voltage support or step-up.

Small Is Profitable also lists twenty-seven benefits of DG for reliability - benefits 71 to 98 out of the 207 Benefits of DG described in the book (see pages 181 to 208).

73 In general, given reasonably reliable units, a large number of small units will have greater collective reliability than a small number of large units, thus favoring distributed resources.

74 Modular distributed generators have not only a higher collective availability but also a narrower potential range of availability than large, non-modular units, so there is less uncertainty in relying on their availability for planning purposes.

75 Most distributed resources, especially renewables, tend not only to fail less than centralized plants, but also to be easier and faster to fix when they do fail.

HECO/DBEDT-IR-8: Ref: DBEDT Preliminary Statement of Position,
page 6

- a. Does DBEDT agree that there is a direct linkage between the size and configuration of a utilities (sic) electric system and necessary requirements for interconnection of DG?
- b. What characteristics of a DG system impact interconnection requirements?

DBEDT REPLY TO HECO/DBEDT-IR-8:

- a. DBEDT agrees that these factors would have direct relevance. It appears that, for example, safety-related requirements would vary little with grid size. HECO, and perhaps other parties with direct experience, would be in a better position to address this issue with specifics.
- b. Please see documents referenced in DBEDT PSOP.

HECO/DBEDT-IR-9: Ref: DBEDT Preliminary Statement of Position,
page 23

Which factor is a greater determinant of whether or not a customer will accept a DG facility on its property - the desire of the customer for energy savings or a benefit that the utility may achieve regarding its distribution system?

DBEDT Reply to HECO/DBEDT-IR-9: The customer's desire for energy cost savings or a requirement for greater reliability than can be achieved by the utility system will likely drive the business decision as to whether or not to accept a DG facility on its property. A subset of businesses may also decide to deploy renewable DG out of environmental concerns. The utility may be able to provide additional incentives to the customer from savings to the utility from the operation of the DG system.

HECO/DBEDT-IR-10: Ref: DBEDT Preliminary Statement of Position,
page 24

DBEDT states that all commercially available forms of DG are feasible in Hawaii.

- a. How does DBEDT define "commercially available"?
- b. Does commercial availability account for elements such as cost effectiveness or whether a technology has been successfully demonstrated in Hawaii?

DBEDT REPLY to HECO/DBEDT-IR-10:

- a. DBEDT defines "commercially available" as any DG technology available from a vendor, ESCO, or utility in Hawaii that has also been installed in another jurisdiction where operating experience and data were acquired.
- b. Cost-effectiveness of DB may not necessarily be constrained, for example, by a definition designed for a particular policy such as the new RPS law. Also, whether a technology has operated in Hawaii should not be a disqualifying factor, in and of itself. Commercially available DG systems that provide electricity service at a premium to utility rates may nevertheless be installed for customer-defined "value", which may not be measurable strictly in terms of avoided cost. For example, a customer may want to demonstrate commitment to renewable energy, or take action to reduce their impact on the environment, global climate change, and to preserve Hawaii as paradise.
- c. That said, for the purpose of factoring DG/CHP systems into such regulatory structures as rate bases, or to count toward a

utility's RPS percentages, appropriately defined financial criteria would apply. Financial criteria may include such concepts as incentives for tangible benefits a utility may obtain from DG on its grid, as cited in other DBEDT replies.

HECO/DBEDT-IR-11: Ref: DBEDT Preliminary Statement of Position.

Exhibit 1 (page 1, footnote 1) to Prehearing Order No. 20922, issued April 23, 2004, states: "The Department of Business Economic Development and Tourism represented that it was interested in serving as a resource for technical information for the parties in the proceeding. Based on the representations of the participants, the parties agreed that the participants would be allowed to present recommendations on any of the issues in the instant proceeding provided that any recommendation be provided as the respective participant's Preliminary Statement of Position, followed by written testimonies in support of said position in accordance with the Stipulated Regulatory Schedule attached to this Stipulated Prehearing Order."

Please confirm that DBEDT will be following up its Preliminary Statement of Position with written testimonies in accordance with Prehearing Order No. 20922.

DBEDT Reply to HECO/DBEDT-IR-11: Yes.

Life of the Land

LOL-SOP-IR-15: (a) Can a fair market for all DG players exist if the utility participates directly in the DG market, without establishing any firewalls between its DG sector and other sectors of the company? (b) Does DBEDT believe that it is in the economic self-interest of the utility to use its resources to delay, defer and/or block independent companies from establishing markets in Hawaii?

DBEDT Reply to LOL-SOP-IR-15: DBEDT sees this docket as the process to answer questions such as those posed by LOL and to determine whether regulation to deal with such concerns is warranted.

LOL-SOP-IR-16: Is DBEDT aware of any studies or analysis that would indicate that standardized interconnection agreements and power purchase agreements lead to savings in time and/or money. If so, please name all studies, reports, workpapers and analysis that the CA (sic) has reviewed to indicate how interconnection agreements are streamlined, less stringent, and/or less timely.

DBEDT Reply to LOL-SOP-IR-16: DBEDT provided a list of references and links related to interconnection in its PSOP.

LOL-SOP-IR-17: Should the prices associated with generation, transmission & distribution, and ancillary functions be unbundled so as to send correct price signals to the market.

DBEDT Reply to LOL-SOP-IR-17: This question raises issues beyond the scope of this docket.

LOL-SOP-IR-18: (a) Does DBEDT believe that the current IRP Framework would allow for modeling of multiple small generators?

(b) If the benefits/costs of DG systems are site-specific, and IRP is a general plan that does not get down to the level of detail to include site specific data, how can DG be evaluated in the IRP process: (c) How does the DBEDT believe that the role of micro- and mini- on-site generators should be handled within an IRP Framework? (d) Are construction and operation costs similar for utilities and non-utilities?

DBEDT Reply to LOL-SOP-IR-18: a. Yes. b. It remains to be seen if this is necessary or desirable. c. DBEDT has not taken a position on this issue. d. If LOL is referring to DG systems, DBEDT has no information on relative costs.

LOL-SOP-IR-19: The future could consist of rising energy demand coupled with rising efficiencies for power plants. This could result in either an increase in actual foreign fuel needed. Would this satisfy the state directive to decrease the use of fossil fuels?

DBEDT Reply to LOL-SOP-IR-19: This question is incomplete and we are unclear on what is meant, especially in the context that could have been set by completing the second sentence..

LOL-SOP-IR-20: (a) Does DBEDT support government-to-government wheeling? (b) If so, under what conditions?

DBEDT Reply to LOL-SOP-IR-20: a. How does LOL define government-to-government wheeling? b. What conditions does LOL envision?

LOL-SOP-IR-21: The Maui County Virtual Power Plant (VPP) proposal refers to a network of grid-connected, utility-controlled, economic-dispatchable, peak load providing

generators. To what level of expertise has the DBEDT evaluated the VPP option?

DBEDT Reply to LOL-SOP-IR-21: We have read the proposal, but it has not been subjected to a rigorous technical analysis.

LOL-SOP-IR-22: Can DG be used for customers usage except for the peak periods, when the electricity from the DG facility is fed into the grid?

DBEDT Reply to LOL-SOP-IR-22: Customer-owned DG can be operated according to the owner's requirements under a wide variety of scenarios.

LOL-SOP-IR-23: How does DBEDT believe that positive externalities associated with renewable energy DG (hedging against fossil fuel price volatility; hedging against fossil fuel price spikes; reduced environmental compliance risk; security risks) should be accounted for?

DBEDT Reply to LOL-SOP-IR-23: DBEDT is not clear regarding what context LOL envisions accounting for these externalities?

LOL-SOP-IR-24: (a) Does DBEDT use any probability analysis, confidence interval estimates, correlation analysis, regression modeling or other statistical analysis? (b) Does this include analysis of the need for standby charges, spinning reserves, transmission line redundancy, distribution line redundancy, and multiple simultaneous DG equipment failures? (c) Please explain any type of probability analysis DBEDT is aware of to evaluate the likelihood of multiple DG systems failing simultaneously; (d) Contingency planning calls for the utility to be able to have one generator down for service while a second one fails. Contingency planning calls for the utility to be able to have

one transmission line to be down when another one fails. Should the utility have a higher standard for distributed generation, that is, the utility must plan for all generators to fail simultaneously? (e) Should utility upgrades occur where (1) the load is higher; (2) where there is a history of failures; or (3) where there is a higher probability of future failure?

DBEDT Reply to LOL-SOP-IR-24: DBEDT believes the utilities would be in a better position to respond to LOL's questions.

LOL-SOP-IR-25: Should comparisons of alternative technologies include the multiplier effect, job creation, economic growth, fuel volatility and security: (b) For each of the following, please explain how DBEDT analyses, incorporates and/or utilizes it in evaluating alternative energy plans and/or DG analysis: (1) job creation; (2) economic growth; (3) the economic multiplier effect; (4) balance of trade issues; (5) export expansion; (6) import substitution; (7) foreign investment; (8) leakage?

DBEDT Reply to LOL-SOP-IR-25: a. In what context does LOL envision such comparisons? b. To which DBEDT analyses does LOL refer?

LOL-SOP-IR-26: (a) Regarding DBEDT's DG study conducted by Global Energy Partners, please provide a copy of ALL DBEDT/GEP contracts, workpapers, correspondence, draft reports, analyses, and final reports and any other document(s) associated with this project.

DBEDT Reply to LOL-SOP-IR-26: DBEDT will complete its editing of Global Energy Partners' study and provide CD-ROM copies to the parties by the end of July 2004. Provision of the other

materials requested would be excessively burdensome. Related files can be made accessible to Life of the Land for inspection.

The Gas Company

TGC/DBEDT-SOP-IR-1: Ref: DBEDT Preliminary Statement of Position, Issue 2, p. 8 ". . . DBEDT believes that electric utility customers/end users, energy service companies/DG vendors, and the electric utilities should be allowed to own and operate DG projects."

- a. In its October 1998 Statement of Position in Docket No. 96-0493, DBEDT proposed that generation should be provided by independent subsidiaries for electric utilities, "in a manner to ensure that any competitors would be on an equal footing with the competing element of the former utility" for access to customers, facilities, etc. DBEDT likewise identified a need to mitigate the generation market power of vertically integrated incumbent electric utilities via organizational separation and the application of strict codes of conduct governing affiliate transactions, etc. (ES-5, 7, 9, SOP 19, 25, 38).

- i) Please explain or reconcile these positions.
- ii) Please explain DBEDT's position on whether a vertically integrated, shareholder-owned, electric utility company should be allowed to own and operate user-sited DG designed not to sell electricity back to the grid, as a utility function, above the line, at other ratepayer expense, and give the rationale.
- iii) Please explain DBEDT's position on whether a vertically integrated, shareholder-owned,

electric utility company should be allowed to own and operate user-sited DG designed not to deliver electricity to the grid, as a non-utility function, below the line, at shareholder expense, and give the rationale.

- iv) Please explain DBEDT's position on whether a vertically integrated, shareholder-owned electric utility company should be allowed to own user-sited DG designed not to deliver electricity to the grid, exclusively as a utility affiliate and give the rationale.
- v) Does DBEDT believe that new entrants to the market of providing user-sited DG in Hawaii would be discouraged if an incumbent electric utility having market power is allowed to enter that market? If not, why not?
- vi) Does DBEDT believe that there should be any conditions on incumbent electric utilities having market power entering into the market of providing user-sited DG? Please explain. Does your answer change if the user-sited DG is not designed to deliver electricity to the grid?

DBEDT Reply to TGC/DBEDT-SOP-IR-1: DBEDT notes that Docket 96-0493 is closed and that the Statement of Position, which was in the context of an investigation of the deregulation of vertically integrated electric utilities using central station power plants, did not consider DG/CHP issues. Moreover, DBEDT's

position on issues addressed in that Statement of Position may have changed.

With regard to elements of the preceding IR that relate to Docket 03-0371, DBEDT has not developed a position on the final form of regulated or non-regulated development of DG/CHP.

TGC/DBEDT-SOP-IR-2 In its October 1998 Statement of Position in Docket No. 96-0493, DBEDT stated, "A critical first step to competition is a clear decision that all new generation requirements will be subjected to competitive bidding." (p. 6).

- a. Does DBEDT envision some form of competitive bidding program as a precursor or precondition for the utility installing, owning and operating user-sited DG that is designed not to deliver electricity into the grid? Please explain.
- b. Does the response change if the DG is designed to deliver electricity to the grid on an emergency, peaking, as available, or baseloaded basis? Please explain.

DBEDT Reply to TGC/DBEDT-SOP-IR-2:

See previous reply.

TGC/DBEDT-SOP-IR-3:

- a. Will DBEDT sponsor a witness, either in house or a consultant, for purposes of responding to questions about the positions, ideas, and content of the

resources contained in its preliminary statement of position?

- b. Please identify any witness(es), consultant(s) and consulting firm(s) DBEDT is considering or expecting to sponsor in testimony, final statements of position or rebuttal, workshops, or otherwise in this proceeding or while this proceeding is pending a decision.
- c. Please provide copies of any testimony, comments, position statements, articles, memoranda or other written documents, slides, etc., prepared in part or wholly by such in house witnesses or consultant(s) or consulting firms since enactment of PURPA in November 1978 which address the topics of (1) market power or market concentration in gas or electric wholesale or retail markets, (2) affiliate rules, standards and/or codes of conduct, (3) distributed generation or cogeneration/CHP, (4) divestiture or other structural or functional separation of the generation function by vertically integrated electric utilities, (5) unbundling of electric utility rates or services, (6) cost allocation, rate design, incentive or performance-based rates for electric or gas utilities at the state or federal level, (7) any facet of integrated resource planning, (8) back-up/standby rates or rate design and scheduled maintenance rates, (9) bypass or "uneconomic bypass," or customer retention-type rates, and (10) competitive bidding for generation.

DBEDT Reply to TGC/DBEDT-SOP-IR-3: a. DBEDT will be following up its PSOP with written testimonies in accordance with Prehearing Order No. 20922. b. and c. DBEDT has referenced or provided the basis of its written testimony in its PSOP.

TGC/DBEDT-SOP-IR-4: Ref: DBEDT Preliminary Statement of Position, Issue 3, p. 9

- o Please explain in detail the type of incentive mechanism DBEDT recommends for "targeted areas," including but not limited to how such areas will be selected, how incentives will be determined and paid, eligibility, procurement, monitoring, and how the mechanism will maximize total benefits.
- o Please explain how this proposed incentive for non-utility DG squares with the statements on page 8 regarding electric utility ownership of DG. Please provide any documents analyzing or discussing this issue.

DBEDT REPLY TO TGC/DBEDT-SOP-IR-4: DBEDT does not offer a specific incentive mechanism, nor offer a system of incentives. We seek to offer ideas for consideration of the parties and have provided references and/or links to relevant documents.

TGC/DBEDT-SOP-IR-5: Ref: DBEDT Preliminary Statement of Position, Issue 5, pp. 11-12.

Does DBEDT recommend the RMI resource planning and rate design changes quoted on the cited pages? If so, please explain how those changes should be implemented and in what forum. If not, please explain DBEDT's position on rate design in this proceeding.

DBEDT REPLY TO TGC/DBEDT-SOP-IR-5: DBEDT does not offer a rate design. We seek to offer ideas for consideration of the parties and have provided references and/or links to relevant documents.

TGC/DBEDT-SOP-IR-6: Ref: DBEDT Preliminary Statement of Position, Customer Retention Rates, p. 20

- a. Please explain in detail why allowing utility ownership of DG makes it appropriate to eliminate customer retention rates.
- b. Does DBEDT support elimination of such rates if utility are not permitted to own DG? Why or why not?

DBEDT REPLY TO TGC/DBEDT-SOP-IR-5: a. If the objective of customer retention rates is to keep a customer on utility service to continue to share revenue requirements, but utility DG/CHP can be provided, then customer retention rates would compete with utility DG/CHP service. b. DBEDT believes customer retention rates are appropriate only in circumstances where they can be shown to protect ratepayers.

TGC/DBEDT-SOP-IR-7: Ref: DBEDT Preliminary Statement of Position, Issue 6, p. 23 "We note that the HECO utilities are planning for forecasted combined heat and power for the first time in IRP-3. We believe that this should be continued."

Please state whether DBEDT takes the position that the electric utilities' IRP process should take into account third-party-owned DG as well as utility-owned DG, and give the rationale.

DBEDT Reply to TGC/DBEDT-SOP-IR-7: In the cited material, DBEDT noted that the HECO utilities are forecasting CHP capacity and energy for the first time in IRP-3. DBEDT supports inclusion of all DG/CHP in IRP to the extent practical.

CERTIFICATE OF SERVICE

I hereby certify that I have this date served a copy of the foregoing Department of Business, Economic Development, and Tourism Consolidated Response to Information Requests on Its Preliminary Statement of Position upon the following parties, by causing a copy hereof to be mailed, postage prepaid, and properly addressed to each such party.

DIVISION OF CONSUMER ADVOCACY	3 copies
335 Merchant Street	
Room 326	
Honolulu, HI 96813	

THOMAS W. WILLIAMS, JR. ESQ.	1 copy
PETER Y. KIKUTA, ESQ.	
Goodsill, Anderson, Quinn & Stifel	
Alii Place, Suite 1800	
1099 Alakea Street	
Honolulu, Hawaii 96813	

WILLIAM A. BONNET	1 copy
Vice President	
Hawaiian Electric Company, Inc.	
Hawaii Electric Light Company, Inc.	
Maui Electric Company, Limited	
P. O. Box 2750	
Honolulu, Hawaii 96840-0001	

PATSY H. NANBU	1 copy
Hawaiian Electric Company, Inc.	
P. O. Box 2750	
Honolulu, Hawaii 96840-0001	

ALAN M. OSHIMA, ESQ.	2 copies
KENT D. MORIHARA, ESQ.	
841 Bishop Street, Suite 400	
Honolulu, Hawaii 96813	

ALTON MIYAMOTO 1 copy
President & CEO
Kauai Island Utility Cooperative
4463 Pahe'e Street
Lihue, Hawaii 96766

GEORGE T. AOKI, ESQ. 1 copy
The Gas Company
P.O. Box 3000
Honolulu, HI 96802-3000
for hand delivery:
Topa Fort St. Financial Tower
745 Fort St., 18th Floor
Honolulu, HI 96813

STEVEN P. GOLDEN 1 copy
The Gas Company
P.O. Box 3000
Honolulu, HI 96802-3000
for hand delivery:
Topa Fort St. Financial Tower
745 Fort St., 18th Floor
Honolulu, HI 96813

GAIL S. GILMAN 1 copy
The Gas Company
P.O. Box 3000
Honolulu, HI 96802-3000
for hand delivery:
Topa Fort St. Financial Tower
745 Fort St., 18th Floor
Honolulu, HI 96813

BRIAN T. MOTO, CORPORATION COUNSEL 1 copy
County of Maui
Department of the Corporation Counsel
200 S. High Street
Wailuku, HI 96793

CINDY Y. YOUNG, DEPUTY CORPORATION COUNSEL 1 copy
County of Maui
Department of the Corporation Counsel
200 S. High Street
Wailuku, HI 96793

KALVIN K. KOBAYASHI, ENERGY COORDINATOR County of Maui Department of Management 200 S. High Street Wailuku, HI 96793	1 copy
WARREN S. BOLLMEIER II, PRESIDENT Hawaii Renewable Energy Alliance 46-040 Konane Place, #3816 Kaneohe, Hawaii 96744	1 copy
JOHN CROUCH Box 38-4276 Waikoloa, HI 96738	1 copy
RICK REED Inter Island Solar Supply 761 Ahua Street Honolulu, HI 96819	1 copy
HENRY CURTIS Life of the Land 76 North King Street, Suite 203 Honolulu, HI 96817	3 copies
SANDRA-ANN Y. H. WONG, ESQ. 1050 Bishop Street, #514 Honolulu, Hawaii 96813 Attorney for: Hess Microgen	1 copy
CHRISTOPHER S. COLMAN Deputy General Counsel Amerada Hess Corporation One Hess Plaza Woodbridge, N.J. 07095	1 copy
MICHAEL DE'MARSI Hess Microgen 4101 Halburton Road Raleigh, NC 27614	1 copy
LANI D. H. NAKAZAWA, ESQ. Office of the County Attorney County of Kauai 4444 Rice Street, Suite 220 Lihue, HI 96766	2 copies

GLENN SATO, ENERGY COORDINATOR
c/o Office of the County Attorney
County of Kauai
4444 Rice Street, Suite 220
Lihue, HI 96766

1 copy

JOHN W. K. CHANG, ESQ.
Deputy Attorney General
Department of the Attorney General
State of Hawaii
425 Queen Street
Honolulu, Hawaii 96813
Attorney for: The Department of Business
Economic Development and Tourism

1 copy

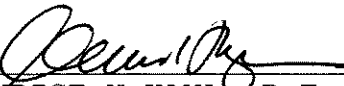
MAURICE H. KAYA, P.E.
Chief Technology Officer
DBEDT-Strategic Industries Division
P. O. Box 2359
Honolulu, HI 96804
for hand delivery:
235 S. Beretania Street, Room 502
Honolulu, HI 96813

1 copy

STEVEN ALBER
Energy Analyst
DBEDT-Strategic Industries Division
P. O. Box 2359
Honolulu, HI 96804
for hand delivery:
235 S. Beretania Street, Room 500
Honolulu, HI 96813

1 copy

Dated: June 16, 2004

By 
MAURICE H. KAYA, P.E.
Chief Technology Officer
Department of Business,
Economic Development, and
Tourism